THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. II.] Copyright, 1876, JAMES R. OSGOOD & CO. [NO. 70.

BOSTON, APRIL 28, 1877.

CONTENTS.

SUMMARY:—
Fire-Escapes in Hotels.—The Courtesy of Building-Committees.—Where the Responsibility lies.—The Proposed Change in the Duties of the Supervising Architect.—Utilizing Gas-Pipes at Fires.—The Utah Mounds.—Changes in the Royal Institute of British Architects 129
FIRES IN HOTELS 130
STUDIES OF INTERIOR DECORATION. VII. 131
THE ILLUSTRATIONS:—
House at Holyoke, Mass.—Store in Boston.—Alterations at Holt-Averell.—Bank at Northampton.—Hotel Boylston . 132
THE BOSTON CHAPTER A. I. A. 133
A TALK ABOUT QUEEN ANNE 133
CORRESPONDENCE:—
Letter from St. Louis 134
COMMUNICATIONS:—
Central Park.—Traps 135
NOTES AND CLIPPINGS 135

WE see notices of resolutions and orders passed by the authorities of various cities, which require hotel-keepers to provide their houses with proper appliances for the extinguishment of fire, and for the relief of their guests who may be exposed to danger by it. The fire commissioners of New York have required the managers of all hotels, theatres, and other places where people assemble, to furnish them with suitable fire-alarms and apparatus. Attention has been called to a law in Wisconsin, which orders that innkeepers shall furnish all the rooms above the third stories of their hotels with ladders of rope or chain, "in order to facilitate the means of egress from such room or apartment by the occupants thereof." It is on record however, that the Southern Hotel was provided with hydrants and hose, which no one thought of using, although the people in it had the warning of a fire which had occurred in the building a week before. As for the Wisconsin law, we should think it would be small comfort to a remote lodger in a hotel some dark night, to reflect that all his unknown neighbors had rope-ladders to their windows; nor should we think the hotel-keepers would show great alacrity in "facilitating the means of egress" of Tom, Dick and Harry unwatched. Nor, in fine, do we consider it a decent condition of things which requires a statutory provision for facilitating the egress of women and children by night from fourth and fifth story windows on rope-ladders. It is to be hoped that no uncertain palliatives will be allowed to divert the public attention from the need of careful building, or take the place of such care in planning and constructing as shall make hotels reasonably difficult to burn, and reasonably easy to get out of if they do burn. We are glad to be told that in one large city at least, there is an effort stirring to provide for this matter in a building-law.

WE have received from an unknown correspondent a letter which we should have been glad to publish if the writer had conformed to our necessary rule by sending us his name and address. He tells the familiar story of a competition in which by invitation he submitted two successive studies. They were returned to him without the smallest acknowledgment or thanks for favors rendered. The truth is probably that committees or individuals to whom designs are submitted in competition do not give any thanks for them, simply because it never enters their heads that thanks are due. They do not conceive that the competing architects do them any favor; they are more apt to think that in inviting or permitting an architect to compete, they are doing him the favor, assuming that the possible chance of getting work is an advantage in return for which he is glad to give his time and money; and they no more feel themselves under obligations than they do for the advertising samples that are left with them by drummers.

WE do not see that any one can be complained of for this view but the architects themselves. It is not courteous, but the tendency of business is against courtesy. Architects know very well that the advantage to the client is great, and to themselves small; but the aleatory nature of the transaction entices them, and they gamble. It does not, as they acknowledge, encourage their self-respect, and of course not the respect of other people. Some architects set their faces against it, but there are enough left to establish the habit. They not only consent, but beg permission, to offer drawings in competition; and they spend more labor and money than is required upon them, making them needlessly elaborate, in the hope to outshine their competitors. It is not strange then that committees, seeing this eagerness, should think they have favors to bestow, and even conclude that the burden of obligation is on the architects' side. Architects can set the matter right whenever they are willing to exercise sufficient self-restraint; till then they have only themselves to blame. Considering the immense amount of work they spend in competitions, nine-tenths of which is entirely thrown away, it is worth their while to consider the sensible words with which our correspondent concludes his letter: "On whatever basis professional men take their stand, the individual members will soon find their level. If the basis is that of incessant competition, it will be sad for that profession both as regards its own pocket, and the respect of the world; but in final success and standing the result will still be the same."

IT is said that the Secretary of the Treasury has determined to divide the onerous duties which now fall upon the Supervising Architect, appointing an architect who shall be charged simply with the designing of the buildings which are built under care of the office, and leaving the functions of the Supervising Architect to be merely administrative. We are told that Mr. Hill will retain his place as Supervising Architect, and that the position of designing architect has been offered to Mr. James K. Wilson of Cincinnati. Mr. Wilson's ability as an artist and designer is well known among his brother architects; and if the duties of the office are to be assigned in the way that we have mentioned, they will be glad that the Government secures so capable a man for the new position. We do not believe, however, that such a division is the best escape from the difficulties of the present position. The real trouble with the Supervising Architect's office, architecturally speaking, has been that it gave one man a great deal more designing to do than he could possibly do his best with, even if he had nothing else to do; and unless the work of the office is to be greatly diminished, this difficulty will not be removed by giving him nothing else to do. The remedy proposed by Mr. Potter and Mr. Hill in the last two reports from the office, of dividing the work among a number of local architects, is the only reasonable one. These local architects might be selected in a variety of ways. They might be chosen in competition; or they might hold permanent government appointments like the departmental architects in France, or temporary appointments established where there was need of their services. In the present political condition of the country there is not much to be said in favor of increasing the number of permanent appointments, and even temporary ones might be only an embarrassment to the Government. A well-administered system of competitions would probably be the most helpful to the national architecture, and most beneficial to the Government, which, with the immense amount of work it has to do, ought surely to command the services of more than one able architect.

APROPOS of putting out fires, we are reminded that a Frenchman, M. Ambroise Pétry, has hit upon an ingenious device for applying the remedy at the right point in case of theatre fires. Considering that such fires usually take from the gas-lights, he proposes to make a connection between the gas-piping and water-piping of theatres, so that when fire takes, the gas can be turned off, and the water, being turned on simultaneously, would find its way directly to the point where the gas had set the fire. The obvious objections are that the water would find its way also to points where it was not wanted, and that gas might be extinguished where it was

wanted, difficulties which would be but partially overcome by dividing the pipes into independent sections, while the quantity of water delivered through the gas-burners could be but very small.

A Western paper gives accounts of discoveries made in excavating mounds in Utah, some of which are more significant and surprising archæologically than any that we have yet seen recorded. In one of the mounds were found last year skeletons of a man and woman, — the man six and a half feet high, and holding in his right hand a weapon of iron which was eaten with rust so that it crumbled to pieces. At the head of the woman's skeleton was found a carved tombstone; and in a tight box or receptacle of hard concrete near by was a small amount of wheat-kernels, most of which fell into powder on being exposed to the air, though a few grains in the centre of the heap retained their form, and when they were subsequently planted grew and produced a kind of wheat unlike any known in the neighborhood. Houses were found in the mounds, with plastered chambers in good preservation, some white, some red; pottery and cooking-utensils, and bits of curiously carved cedar, millstones, clay moulds as if for casting, and needles made of deer's horns. On one large vase of stoneware was a recognizable outline of the mountains in the neighborhood. A suspiciously modern air is given to the account by the statements that there were found many pieces of "crockery" similar in pattern to what is now in use, and well-shaped lasts, — of stone, to be sure, — and that the stem of a large pipe was between the teeth of the male skeleton.

The Royal Institute of British Architects has for some time been considering the necessity of making some changes in its working. A Committee for the Improvement of the Institute was appointed a while ago, and we find an account of its report in a late number of the *Architect*. The Institute is established upon a royal charter, which prescribes the form of its organization. There was, we believe, some talk of getting a new charter; but to procure a charter requires an expenditure of several hundreds of dollars, and for this reason or for others a less extended scheme of reform is proposed. With regard to the standard of membership, the committee recommend that in order to better test the qualifications of candidates, all associates shall pass a professional examination before their election. This provision, however, is not to be put in force for five years. The rules of election have been somewhat relaxed of late years, and the committee propose a return to the earlier custom by which four-fifths of the votes cast were needed to elect a member. It is also proposed that a new class of members shall be established called Honorary Associates, who may be artists, archæologists, or amateurs, but who are not to be connected with any of the building-trades. There have been hitherto certain differences in the standing or membership of the city and the provincial members, which have given the Institute the character of a metropolitan rather than of a national association: these differences it is proposed to abolish, with the suggestion — which to an uninformed outsider has a little the ring of *naïveté* — that "it is unadvisable, and indeed disrespectful to the provincial members, that they should remain on a different footing from their metropolitan brethren as to their financial support of the Institute." Therefore it is proposed to raise their fees to an equality.

A suggestion has been made more than once for the fusion of the Institute and the Architectural Association, a plan which has, we believe, met more or less favor among the members of the Association who are also members of the Institute, but has been resisted by the independent members, and is declared by the committee to be at present neither practicable nor advisable. Some suggestions are offered, however, for more intimate communication with the various architectural societies, of which several exist in the kingdom, — in Scotland and Ireland, and in the provincial towns of England, — although it is not thought that any system of affiliation which has yet been suggested would be desirable. It may be presumed that the Institute would not be willing to waive supremacy, and that the other societies would object to taking the position, against which indeed members of the Architectural Association have distinctly protested, of subordinate sections in the general body. It is recommended that as much encouragement as possible should be given to the use of the Institute library by those who are entitled to it, and that the hours during which it shall be kept open be extended; and on the other hand, "that all possible encouragement should be given to the Association in its educational work, and that the Institute, which has never charged itself with similar functions, should no longer retain a class of students which for many years has been merely a nominal one, and the existence of which conveys a wrong impression."

FIRES IN HOTELS.

A good many of our cities are providing themselves with building-laws or revising their old ones, and the burning of the Southern Hotel is an admonition to take some care for the security of a class of buildings which have received little attention thus far. Such attention has become necessary. In the planning and construction of our hotels, care is given to almost every exigency except security against fire. This is neglected, not because it is not as necessary as other things that are provided for, but because there is no profit in it. Our people are willing to pay largely for luxury and splendor, but not for security, unless when imminent danger warns them. Under these circumstances we need hardly expect that either "*caupones maligni*" — or even *benigni* — or their proprietors will spend any more money than the rates of insurance compel in guarding their hotels against fire; nor any more than acknowledged decency requires in guarding their guests, which is a very different thing from the other. Nor need we expect that the public, except as they are warned from time to time by severe disasters, will be much influenced in their choice of hotels by considerations of safety. They will be attracted by convenience and luxury, and if they are true sons of the soil, by bigness, and will take security for granted. Of course the one efficacious and reasonable precaution before all is to build hotels that will not burn, as is done in Europe. The natural objection is that it will not pay. It is found, however, to pay elsewhere; and there is no doubt that if it were made the rule in any city it would be found to pay, though a fire-proof hotel weighted with competition with others that were not so might not pay. There are, it is true, special obstacles in the way of making hotels fire-proof, in that they require very large rooms on the lower floors, and small ones in the upper; and this means unsupported partitions and floors of wide span, which greatly increase the difficulty of using incombustible and heavy material. The difficulty is not invincible, however; and even by distributing the partitions of a building among incombustible cells, through which fire is not easily communicated, a very great gain in security may be had.

But if we are not yet ready to pass laws which require the absolute incombustibility of hotels, certain precautions suggest themselves as the minima of those that should be insisted on. A great part of the danger of our buildings comes from the fact that walls and floors are full of hollow spaces, lined with inflammable material and ready to lead fire unseen through the length and height of them. The floors are a series of wooden tubes a foot square or so; the partitions are honeycombed with air-spaces between the studs, imperfectly closed, and sometimes not at all, at the floors; and when the walls are furred upon masonry the hollow spaces are apt to run continuously from cellar to roof. It is no wonder that among such a labyrinth of passages fire is as hard to trace as vermin. Precautions against this are easy, and there is no reason for not enforcing them. The flues in the floors may be broken at every bearing and every "bridging" by a pugging of plaster between boards, or some equivalent protection. Those in the partitions should be cut off at each floor by a course or two of bricks and mortar, and again by a cross bridging also backed by a bed of mortar, once or twice in each story. Similar care would interrupt the flues behind the plastering of outside and party walls. If this system were thoroughly carried out, — it is a matter of very trifling expense, — and were supplemented by cross partitions of brick, it would make a building which fire could not traverse unseen for any distance, and in which it could not burn

long without eating its way out and declaring itself. The spreading of fire in closed spaces is the source of a special danger, since a fire of considerable extent burning with little access of air produces a great quantity of dense smoke, which is almost as perilous to the people in a building as fire itself.

But beyond checking this inducement to the spread of fire, something ought to be insisted on in the way of actual fire-proof construction. The stairs at least ought always to be such, and in wells of brick which the flames cannot injure. These should be so enclosed, and the neighboring constructions around them fire-proofed for such a distance that there is no chance of flames being drawn into them, at least until the building is on fire to such a degree that men cannot be alive in it. There should be enough of such stairways. They might not be monumental; but if a grand staircase were wanted as a decorative feature, it should supplement them, not supplant. The elevators which are now thought indispensable in large hotels are in more ways than one a serious source of danger. They are of course of no use for escape in emergencies; they disaccustom people to the stairs; they make open wells which serve as combustible chimneys to distribute the flames through a whole building with the greatest rapidity. Elevators will increase rather than diminish in number; and it is therefore important to guard as far as may be against the abuses to which they lead, by insisting that they shall not reduce the provision of staircases, and that like the stairs they shall be incombustible, set in fire-proof wells, and at least so insulated by fire-proof surroundings from the combustible parts of the hotels, that they cannot be communicators of fire. As for their draught, it would probably prove hopelessly inconvenient to close the wells by traps at the various stories, but it is possible that this enemy may be turned to some advantage. If the brick walls of the well were carried above the roof, an ample ventilator at the top might make the well serviceable in giving a vent for the dangerous smoke, the useless car being dropped to the bottom and the ventilator open.

There are certain parts also of hotels as of other buildings, where special dangers are to be looked for; as store-rooms where matches, light fuel, and other inflammable stores are kept; the neighborhood of the cooking and heating apparatus or of the gas-meter. These places at least should be fire-proof, and since they are usually in the basement it is not too much to require that basement partitions and the ground floors of all hotels shall be fire-proof. This alone would cut off a great deal of danger; and, large spans not being necessary in the lower floors, and these floors, often laid with marble, being necessarily heavy and expensive, it would not be a great burden to have to make them of fire-proof material.

A great gain to the safety of travellers might be secured if the planning of hotels were under careful surveillance. In their arrangement certain considerations are influential that offer peculiar difficulties. One of the special requirements of a hotel is a constant supervision; and this supervision, which is one of the defences of the guests, makes it desirable to have but few exits. As a fact few hotels are provided with more than two, or at most three, that are accessible to the public; and of these commonly only one is ample and conspicuous. Happily, hotels are not liable to be swallowed up in flames in a moment, as theatres are; and if there are means enough for getting the inmates safely down stairs, two or three exits which are easy to find and not dangerously near together will probably be enough for the guests when they have once descended. But the intricate corridors and remote staircases which are common ought to be amended. It is perhaps not too much to demand that at every angle in the corridors there should be a staircase, fire-proofed as we have described; and from each room there ought to be a speedy access to at least two. They should be continuous to the lower story, and lead readily to the exits. For the danger that people will neglect the stairs and not know where to find them in haste, there is no remedy except in placing them as conspicuously as may be; but if we could say a word to travellers, we should suggest that if they use elevators to go up, they should accustom themselves to go down by the stairs, and become used to their position. The building of hotels of enormous height is one of the great dangers, and it would be fair to restrict this rigorously by requiring all that had more than three stories of rooms to be fire-proofed throughout. There ought also to be the greatest freedom of ventilation in the corridors, and exterior windows as well, for the smoke even when it is not suffocating is so bewildering that the stagnation of it is more to be dreaded than the possible fanning of the flames.

It has been argued that hotels should be provided with exterior balconies in each story. These might often give a chance for rescue, as was shown at St. Louis; but it would be necessary for their usefulness that they should be accessible from all the rooms. In the labyrinthine hotels of the day they would often be as hard to find as the stairs, besides which they are open to the serious objection that they offer too great conveniences to night-thieves. Fire-escapes are another kind of make-shift, on which too great dependence should not be placed. The New York *Evening Post* quotes from Superintendent Adams mention of one he saw in Chicago, — a loaded endless chain to which men clung, descending by their own weight; a contrivance which might be serviceable to a few cool people, but which, used by an alarmed crowd, would be extremely perilous, we should think.

The other precautions of fire-brigades, hose, and appliances for extinguishing fire, will suggest themselves to every one, and many greater or lesser devices to ward off invited danger will be brought forward; but it is of no use to put our trust in them, and turn our attention away from safe planning and construction. Proprietors will study the capacity, convenient administration, and economy of their hotels, and such other things only as catch the eye and attract the patronage of the travelling public. The travellers themselves will have a keen eye to their comfort and enjoyment, but a dull one to their security. It remains for legislators to protect them by insisting on a reform in the dangerous building of hotels. To lay down abstract rules which should sufficiently cover the difficulties of arrangement without unreasonable restrictions would, it is true, be found extremely difficult; and here the remedy lies mostly in the supervision of efficient and capable public officers.

STUDIES OF INTERIOR DECORATION.

VII.

Referring our readers to the plan of a city house in Plate IV. of this series, we desire first to point out the considerations which led to the constructional form of the dining-room in that plan; second, to ascertain the leading local conditions which must control us in completing this room, and in preparing it for occupation — or in other words, to develop a rational theory for its decoration; and third, to present one of the conclusions which are possible from the premises thus deduced.

We find we have space available for a dining-room sixteen by twenty-two feet, with windows looking toward the south at the end of the room; in the centre of the opposite end is the double door communicating with the parlor, and over it the frieze of stained glass by which some of the south light is borrowed to illuminate and decorate the darker end of that room, as arranged in our preceding paper. The chimney-piece is in the centre of one of the long sides. These dispositions invite the architect to complete the plan of this apartment in harmony with the sentiment of formality which they suggest, so that the eye of the observer may be gratified with an appearance of symmetry or order, each part being essential to the whole, and no feature of construction being accidental or misplaced. In fact, the plan seems to adapt itself to the artificial and conventional conditions of city life, as the same room in a country house, with its windows probably on several sides, each one important not only for light within, but view without, with its doors arranged more for convenience than for order, with its large and irregular boundaries, is fitted for country comfort and *dishabille*. To this end therefore we adjust the necessary appendages of service-stairs and butler's pantry, as well as the approach from the hall, so that the doors may exactly balance one another without straining the convenience of the plan, and the sideboard; the natural *pendant* to the opposite chimney-piece, may be thrown into a recess, thus preventing the room from being cramped in its width, and affording ample space, notwithstanding the projection of the chimney, for the service around the table. In fact, apart from the obvious considerations of comfort, space is an element of architectural effect so important that the architect can devise no detail elegant enough to compensate for its absence. In apartments of ceremony especially, it is his first business to obtain either absolute largeness of area or the appearance of it. Towards this end also, in the present case, a wide square bay-window is projected from the south wall, thus not only adding materially to the space, but affording light in greater quantity and duration than could be obtained by two windows in the flat wall.

These studies relate to the structure of the room. We are now

to form a consistent theory for its decoration or completion. The architectural plan presents two long parallel sides, each symmetrically arranged; and we are to bear in mind that midway between them is to be placed an important piece of furniture, the dining-table, in which the proportion of length is distinctly predominant. We have thus three parallel features, all combined having a tendency to unduly increase the apparent length of the apartment, especially as presented on the occasion of the ceremonious entry from the drawing-room, when the long table is made longer, and set forth in a brilliant perspective of light and color. Now, as we took occasion to state in regard to the drawing-room, it is important to provide for this first impression. If we can so treat this room that its harmony of proportions is at once recognized and its essential relations of parts at once understood on entering, each of its main features appearing in its proper place, an effect of dignity is secured at the outset, and the battle is already more than half gained; the rest of the success is made up of details and of secondary features, which will in turn present themselves to the eye and play their subordinate part in giving to the most unobservant guest a feeling that the place is complete and fit for its purpose, — a sense of unity, in fact, which is hardly less enjoyable, even if he cannot quite account for it. It is the indefinable grace of art added to the hospitality of the feast.

This undue emphasis of the element of length is therefore the first error we have to correct in our study of decoration; and the means of this correction, as in the hall, is to counteract it by drawing attention to the element of width. The leading features on each of the long side walls must be so disposed and divided, if possible, that they shall respectively have distinct relations with corresponding features on the opposite wall; and the evident means of establishing and defining these relations, as our room is sufficiently lofty, are transverse ceiling beams resting upon the dividing pilasters, as shown by dotted lines on the plan. Two of these beams coincide with the trimmer beams of the chimney in the floor above. The room, in short, is thus crossed by comparatively narrow bays. Here is a distinct and legitimate *motif* of composition suggested by considerations of proportion and excused by the actual structure of the room itself.

Another detail of construction is the glass frieze in the partition between the two rooms. This suggests and almost compels the continuation of its lines on the walls, wherever possible, in order to bind the ends and sides of the room together and assist in establishing a condition of unity and interdependence. Our stained glass frieze on the partition between the two rooms is, on the dark side of the partition, a brilliant translucent mosaic; on the illuminated side, a dull and comparatively meaningless mass of slightly contrasting and irregular surface, cut up by lead lines. These lead lines and the border-lines we propose to gild on both sides to convert them into a feature of decoration. The glass frieze in the usual conditions of the light is bright on the drawing-room side, and dark on the dining-room side. In the former the wall frieze, which is continuous with the glass frieze, is therefore, for the sake of unity and to accord with the idea of brightness and gayety which we desire to express there, kept light; in the latter, for similar reasons and for the sake of a contrast of effect, it is kept dark.

But a dark frieze must overweight the wall of which it forms a feature, unless it is balanced by a dark dado at the bottom with an intermediate screen of lighter tone. The walls of our dining-room are thus divided into three horizontal belts, which should be of unequal values in width and color. Equality in these respects would be simply mathematical or mechanical. Harmony, as presented to the ear, demands a contrast of tones; as presented to the eye, there must be a contrast of spaces and colors. No two horizontal spaces or belts should be equal on a wall, and no group of mouldings should be composed of equal members: without a just subordination of parts, we may have good workmanship, but we cannot have good art. On the contrary, as regards the vertical divisions of a wall surface, the requirements of structure as well as of architectural effect frequently compel an exact repetition of parts. The larger the room, the more absolute becomes the necessity for such repetitions, as in the regular bays of a great hall, the dimensions of which are dictated by the necessary equal spacing of the wall-piers and of the roof-trusses which they support. The expression of order and dignity thus obtained is recognized in monumental work, and in general the regular recurrence of similar vertical divisions is associated with the highest efforts of architecture. It affords, perhaps, the most striking contrast between nature and art, — between the creations of the first and of the second order. But in smaller rooms, such as we are now considering, the equal division of a wall by vertical architectural lines is not required by its structure, is inconsistent with its uses, is too formal and stately for comfort, and interferes with the convenient distribution of its furniture. It may be, and often is, acceptable in a corridor, but in a living-room it would be oppressive and intolerable. Hence the irregular but symmetrical vertical division of our long dining-room walls by pilasters.

But whether in monumental or domestic work, whether on the outside or the inside of a building, an equal horizontal division by architectural lines is barbarous. This we regard as a fundamental principle of design.

Now, in adjusting the horizontal divisions of our walls, in the case in hand, we find the width of the frieze dictated by our conditions; the width of the other two members is a matter of feeling. The width of the dado should be distinctly greater than that of the frieze, in order to balance it properly, and either distinctly greater or distinctly less than the intermediate space. But in either event, one member must be plainly larger than the other two. The proportion may be as in fig. 1, in which the screen predominates; or as in fig. 2, in which the dado is superior. In

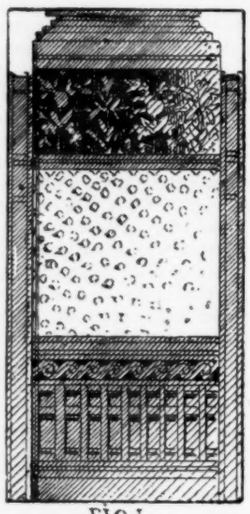


Fig. 1.

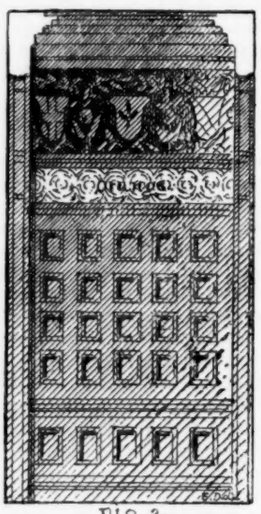


Fig. 2.

the latter case, the dado is to be treated as a panelled wainscot, and the screen, now reduced to a mere subordinate belt, should be more glowing and golden in color, in order to balance and justify the mass of sober wood-color below, and offset the vigorous dark treatment which we have recommended for the frieze. The narrower this central belt becomes, the more intense should be its color; for its function as a foil does not diminish with its size. All this argument proceeds on the basis that the wood is dark, — we assume it to be black walnut. If a lighter wood were used for the wainscot, the bright intermediate belt might be dispensed with; and in this case we must balance the frieze with a belt of ebonized wood, or of tiles, on the line of the chair-rail.

As regards the question of color and tone, we must ever bear in mind that the table, when spread with its white cloth, and set in array with the glitter of glass and silver, and the color of china and flowers, must suffer no competition of brightness on the walls. In the adjoining drawing-room the cold north light is beguiled by gay hangings, and its furniture of dead black and gold, its upholstery of amber and red damask, is set against a light background, shining and luxurious. In the dining-room, on the contrary, the whiteness and glitter of the table should be defined against a rich, dark background, and the warmth of the southern sunlight should be tempered by curtains of grave, neutral tones, enriched with trimmings of strong, bold colors. The æsthetic advantages of the opposition of tones thus obtained between these two rooms is sufficiently obvious. The open door between them, as seen from either side, should frame in a strongly contrasting picture.

These several considerations supply us with a logical theory for the decoration and completion of this room. Observing this theory with intelligence, we can hardly go greatly astray; and it seems to us not inconsistent with a reasonable degree of economy, or with an expenditure however luxurious.

We shall venture in our next pages to give an expression of the ideal which we have thus developed.

THE ILLUSTRATIONS.

HOUSE AT HOLYOKE, MASS. MR. H. F. KILBURN, ARCHITECT.

(229 Broadway, New York, N.Y.)

This drawing shows the house of the Hon. William Whiting in its original and in its altered condition.

ADDITION TO HOLT-AVERELL, COOPERSTOWN, N.Y. MR. H. M. CONGDON, ARCHITECT.

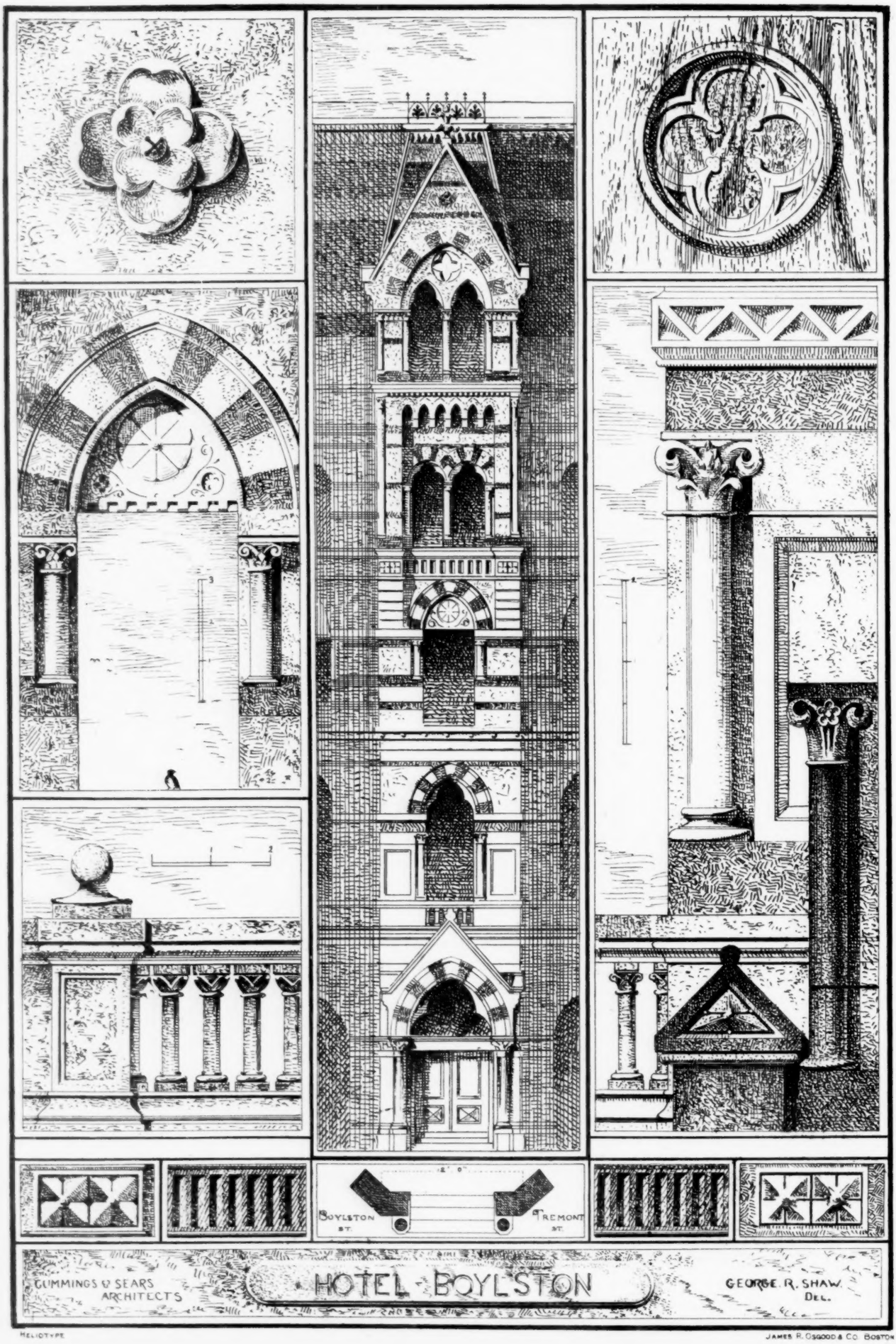
(111 Broadway, New York, N.Y.)

This illustration shows the alterations that have been made in the house of Mrs. J. R. Carter.

BANK AT NORTHAMPTON, MASS. MESSRS. FERRY AND GARDNER, ARCHITECTS.

(33½ Barnes Block, Springfield, Mass.)

These designs were presented in competition some months since.

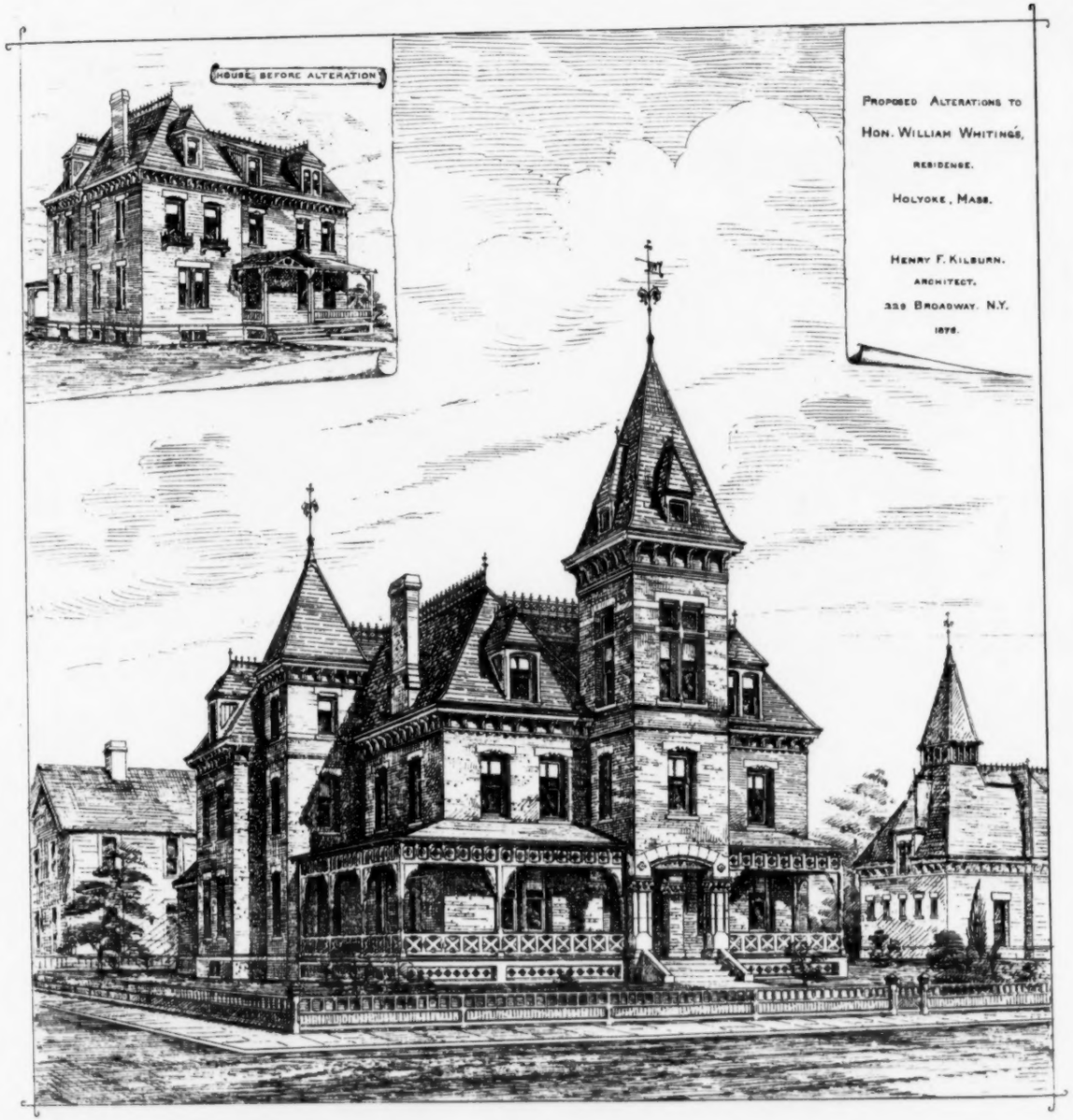


HELIOTYPE
JAMES R. OSGOOD & CO. BOSTON

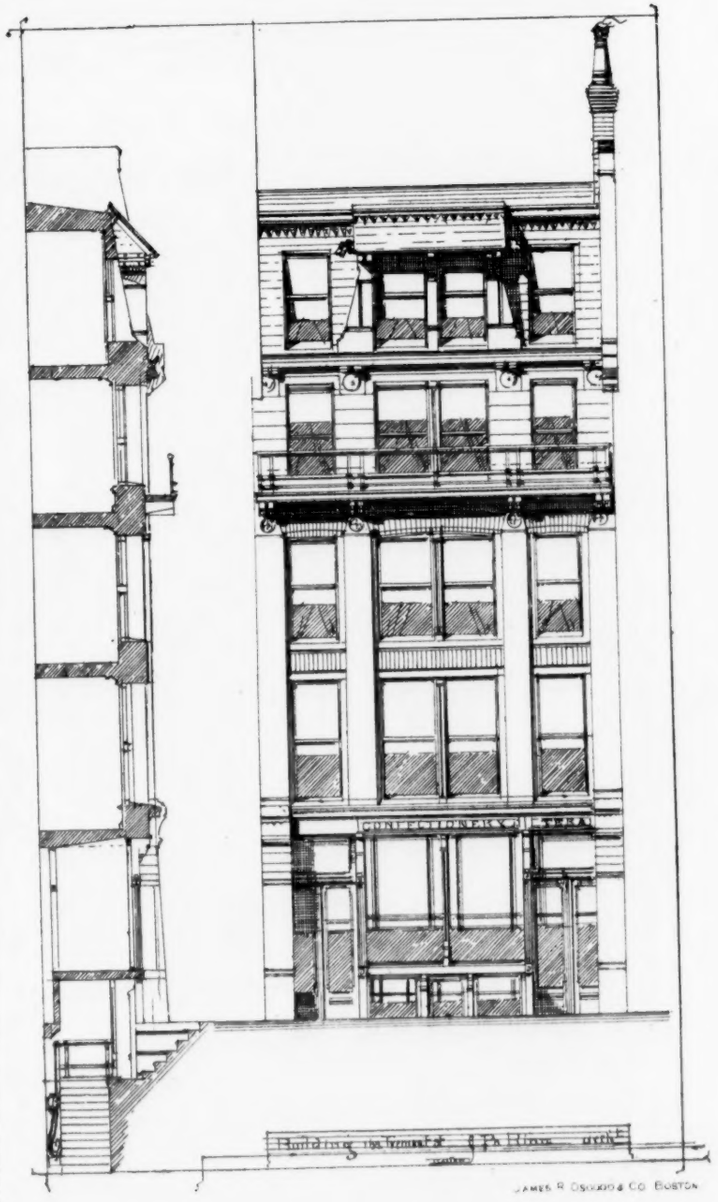
H. M. CONGDON. ARCH'T NEW YORK. | ADDITION TO HOLT-AVERELL. COOPERSTOWN. N.Y. | RESIDENCE OF MRS. J. R. CARTER.

JAMES R. OSGOOD & CO. BOSTON

AMERICAN ARCHITECT AND BUILDING NEWS. APRIL 28 1877.

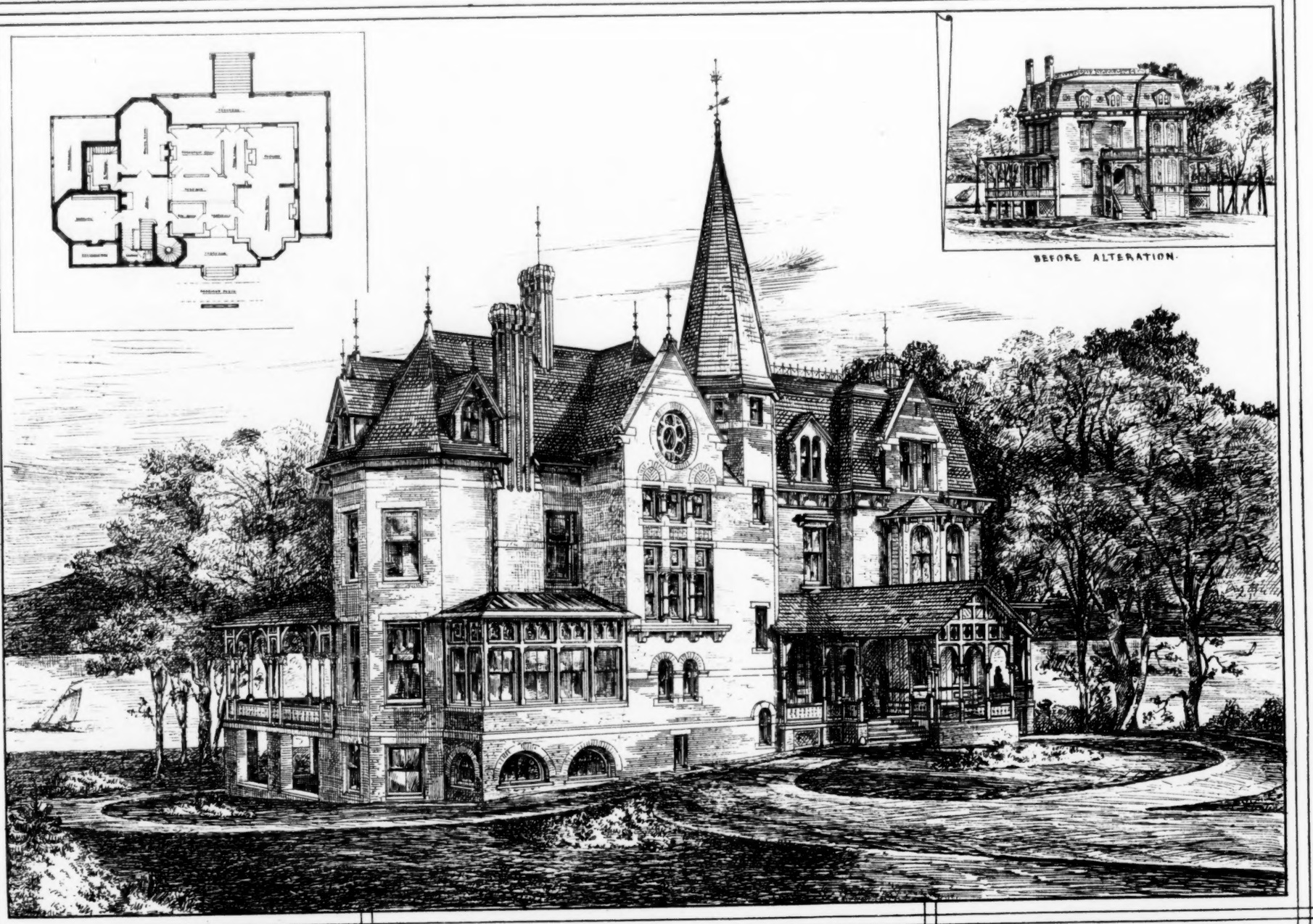


HELIOTYPE



JAMES R. OSGOOD & CO. BOSTON

American Architect and Building News, April 28, 1877



H. M. CONGDON. ARCH'T NEW YORK. | ADDITION TO HOLT-AVERELL. COOPERSTOWN N.Y. | RESIDENCE OF MRS. J. R. CARTER.

JAMES R. OSGOOD & CO. BOSTON

Competitive Designs for Northampton Savings Bank.
Perry & Gardner, Artists
Springfield Mass.

Design for Savings Bank, Northampton Mass
JAMES R. OSGOOD & CO BOSTON

HOTEL BOYLSTON, BOSTON, MASS. MESSRS. CUMMINGS AND SEARS, ARCHITECTS.

(9 Pemberton Square, Boston, Mass.)

This bay of one of the oldest apartment-hotels in Boston was drawn by Mr. G. R. Shaw for the Portfolio Club.

BUILDING ON TREMONT STREET, BOSTON, MASS. MR. J. PH. RINN, ARCHITECT.

(27 Kilby Street, Boston, Mass.)

This store, built of marble and iron, is situated on Tremont Street, facing the Common.

AMERICAN INSTITUTE OF ARCHITECTS.

BOSTON CHAPTER.

The regular monthly meeting of the Boston Society of Architects was held on Friday evening, the 6th April, at the Architectural rooms of the Institute of Technology. Nine members were present, the president, Mr. Cabot, in the chair. A number of students from the architectural department of the Institute were also present by invitation.

The Secretary read several communications received from the Secretary of the American Institute of Architects since the last meeting; after which the subject of the evening was taken up, being the new Trinity Church. Mr. Martin and Mr. Ware had been appointed to open the discussion, the former considering the construction and the latter the design of the building. In the absence of Mr. Martin, the President asked the Secretary to make any observations that had occurred to him concerning that branch of the subject.

The Secretary said he had not carefully considered the subject, and had nothing further to say than that the difficulties presented at the outset of the work by the unusual character of the design on the one hand, and the unsatisfactory bottom under the church on the other, and which had occasioned some uneasiness during the earlier portion of the work, appeared to have been successfully met and overcome. He was not aware of any failure or any apprehension of failure in the four supporting piers of the tower, or in the foundations or piling beneath them. The only feature connected with the construction that he was disposed to regret was the covering up of those great granite piers, and of the brick arches above them, by lath and plaster. So important and grand a piece of building furnished an opportunity for simplicity and strength of effect, which he was sorry to see thrown away.

Mr. Hartwell remarked upon the excellence of the arrangements for ventilation and warming, which had been planned and carried out by Mr. Tudor.

Mr. Peabody spoke of the use of lath and plaster for the walls as opposed to the practice in Europe, where a plastered wall in a church would be regarded as out of place. A church of so monumental a character as this should be treated so as to suffer as little as possible from the decay of such materials as plaster or water-colors.

Mr. Longfellow thought the plastered piers and arches of the central tower conveyed an impression of flimsiness, but that the walls might well enough have been plastered if the real piers and arches had been exhibited.

Mr. Van Brunt remarked that the absence of visible strength in the more important parts of the construction was objectionable in another point of view, as taking away all motive and starting-point for the elaborate decoration of walls and ceilings.

Mr. Longfellow said he would like to know something of the roof-framing. He was under the impression that the tie-beams shown connecting the cusps of the arches of the tower are not essential features in the construction, and he thought them disfiguring.

Mr. Ware took up the design of the building, and showed photographs of several churches in France and Spain, which may be presumed to have furnished to a certain extent the prototype of the church now under consideration. The towers at Zamora and Salamanca, and the apses of several churches in Auvergne, all present greater or less similarities in style and treatment. The principal thing to be noticed in Trinity Church is that it is not Gothic; that it contravenes directly all the fundamental dogmas on which the advocates of Gothic affirm its superiority to other styles. Of these dogmas, the first is that it is the special property of the pointed arch to express the ideas of solemnity, devotion, and aspiration. Here is a church with not a pointed arch in or about it, and which yet has a character of seriousness, solemnity, and serenity, which the pointed arch never attains. The Romanesque buildings heretofore built in this country, of which the building of the Smithsonian Institute at Washington is a fair example, have generally been deficient in dignity. But there are several fine church-towers in this neighborhood, built by Mr. Esty twenty or thirty years ago, the one at Cambridgeport being particularly noteworthy.

The second dogma respecting Gothic architecture — that the multiplication of parts increases the apparent size of an architectural work — the church flatly contradicts. The effect of size, and the impressiveness which comes of it, are, in fact, more readily obtained by few subdivisions, and these as large as possible. St. Peter's at Rome is an instance often adduced to prove the Gothic theory, nobody ever giving the church credit for its actual size; but whether one correctly estimates its dimensions or not, he is impressed by its bigness in a vastly higher degree than he would be were the arches of the nave increased in number and decreased in size. To take an example nearer home, the First Church in Boston owes what impressiveness of effect it has to the fact that its parts are few and large. It is the *scale* that tells. Trinity Church is not a large church, as churches go, but the scale is gigantic; and there are few buildings anywhere whose size is more imposing.

The third dogma that this church sets at defiance is that of "honesty;" the doctrine that the forms and materials relied upon for architectural effect should be those actually employed in the construction. Here, as in most public halls, the architecture of the interior is a screen of lath and plaster. Without undertaking now to discuss the practical arguments in favor of this, or the theoretical arguments against it, which would open a wide field of debate, it is sufficient to inquire whether, upon the theory adopted, the treatment is consistent and satisfactory. Here we find something to regret. The broken arches under the tower are obviously a mere shell or ceiling, and are properly enough thrown into forms impossible to stone. But the walls that are above them and the great piers below are designed as if for stone. If the lines of the great arches which really support the tower had been taken as the *motif* of the decorative treatment, it seems as if there would have been more unity of design. The unpainted wooden tie-beams also, which have an obtrusive air of constructive significance, seem out of keeping with the avowedly inconstructive composition of which they form a part.

Concerning the exterior it might be said that the tower is perhaps too big and too high, not in itself, but as an element in composition. In itself it is noble, and it has a dash and freedom about it more like old work than like modern work; the treatment of the transepts very happy; the carving admirable, though sometimes objected to as being partly conventional and partly naturalistic. The simplicity of the plan is remarkable; on paper it looks like nothing, — as if half a dozen lines expressed it all; the view of the whole church from every point within it is good, and the acoustic properties satisfactory.

Mr. Peabody cited as a contrasting example of these round-arched churches, a work of M. Vaudremer at Montrouge, in which the treatment presented a strong contrast to Mr. Richardson's methods. M. Vaudremer's work was studied with Greek nicety even to the minutest detail, while Mr. Richardson's work is often remarkable for a studied rudeness in the detailed work which we reprobate; and yet he seems thus to leave on his work a charm and interest, while as a whole that of M. Vaudremer is cold and forbidding.

Mr. Ware could not at all agree. If the bases had been as carefully studied as the capitals, we should have felt so much the more satisfaction in the work.

Mr. Longfellow thought Mr. Ware had placed the issue between the Gothic principle and its opposite, respecting the subdivision of parts, on a false basis. It is not solely a question of large or small subdivisions; but the effect of great size is gained by large and broad subdivisions, with small features associated with them to give the scale, as it were; the large features dominating, and their size made manifest by the small. This will account for the success in this respect of Trinity Church; and there is the difficulty with St. Peter's: there are no small parts.

He was glad to hear the transepts of Trinity Church well spoken of. This was the first word he had heard in their praise, but to himself they appeared masterly pieces of composition.

The discussion of Trinity Church ended here; and Mr. Peabody read a paper concerning the revival of the Queen Anne style, so called, which he said was inspired by a feeling that in the discussion on that subject at the February meeting, the value of that style and the importance and significance of the present movement in England were not done full justice to.

A TALK ABOUT "QUEEN ANNE."

[This is in the main the paper read at the April meeting of the Boston Society of Architects, and mentioned above.]

I do not wish to be the champion of all the affectations of the Queen Anne school of design. I fully admit there are such, but I cannot agree with what I understood as the opinions expressed at a late meeting of the Society of Architects.

It then seemed to be held as a movement of no account, — a whim of a few people, and one that we need not interest ourselves about. Now it seems to me, on the contrary, a very decided movement and one of great importance to us. As a fact, whether fortunately so or not, what goes on in England in an art, as in many other matters, is to a certain extent quickly reflected here; and it is well from this point of view to follow closely the Queen Anne movement.

Some six years ago I had the friendship of a London architect, a Gothic designer, but even then an admirer of quaint bits in old

farmhouses, furniture, and the like. Last winter I renewed the acquaintance, and at an early visit found him full of the beauties of some carved figures, Italian, — perhaps of Luca della Robbia's work, — which had been left with him as suggestions for a stained window. This hints at the change in that short time; one that is absolute and decisive in the English view of our art.

The history of the change is as hard to trace as that of any other inevitable wave. Mr. Norman Shaw passes for the chief light of the school; but he was a master in Gothic design before he made this departure. Now it is rather the English fashion for a man to affect some peculiarity of design, and carry it along as his trade-mark. Butterfield has striped Rugby and Keble College; Scott holds to historical precedents; Pearson's eminence is largely due to his having held constantly to Early English work, while Burges took on a French air, and Street had an Italian period. So perhaps Shaw found others could design Gothic work much as he could, and following this English fashion, perhaps he thought that he too must cut out a specialty in design for himself alone. At all events, from his Lyons Church or even Cragside, it is quite a step to Lowther Lodge and New Zealand Chambers; though through it all he still remains a master. But even in England a man does not retain possession of the style he has the audacity to revive, and so Shaw's works have been followed up by London Board Schools at every term, with cheerless interiors, and carved brick garlands and cornices on the outside; by Mr. Stevenson's houses of red brick, — one with a great blue vase in the centre of the front, as if to suggest the wealth of bric-à-brac stored within; by Brydon's cosey houses and studios, and Bodley's School Board building; while in country work nothing is in the latest mode, except it glows with red brick and red tile, and its posts are turned like those in the famous lodge at Regent's Park.

Of all this work the distinctive feature is beyond all its pleasant, homely, hospitable warm color, that should be backed up by the green of old English trees. This is what gives it its chief attraction, and what does not unfortunately reach our shores in the pages of *Architect* or *Building News*. Then its careful brickwork is to be noted, and the extraordinary affectation of cut brick; mouldings, carvings, garlands, all being cut in the bricks after they have become set in the wall. This is accounted much sharper than terra-cotta, and in fact the only worthy material in which to carve the mysterious pot of sunflowers. Again, its white frames and sashes near the face, giving deep interior recesses, its turned wooden posts, and any eccentricity in general design that one can suppose would have occurred to designers one hundred and fifty or two hundred years ago.

But perhaps the change came from within more than from without. Talbert's sideboards that used to be of the most stern mediæval aspect, and were not, I think, permitted a coat of any filling or finishing, now have lost their notches and chamfers and dog-tooth, and the lathe has taken the place of the adze and the hatchet and other rude weapons, while I do not know but French polish even is permitted where once the wear of many hands was held to be the only fit method of filling oak. Morris's papers and stuffs we all know — no gold, sombre neutral tints, while Japanese bric-à-brac, tiger-skins, blue china, screens, fans, Eastern rugs, all lend their aid in furnishing the rooms of to-day. If in architecture proper "Queen Anne" has made but a certain progress, in the less permanent arts connected with the interior its effect is almost universally seen. Go into the St. James Restaurant, an immense building with the front of a Venetian palace. The walls of its grill-room are all of tile or artificial marble, but decorated with all the gods and goddesses and heroes of profane mythology, while over the way in the Criterion is more mythology. You make a call, and find at the door a knocker, and only a knocker. A friend was designing a scene for the stage, — a hall with a great complicated Queen Anne staircase. At the theatre again was a scene with chimney-corner, settles, little window, and all that business complete, and a large collection of blue china in the cabinets. Somebody spoke of a blue-china enthusiast who had blue plates fastened all the way up the string of his stairs; while a collection of old warming-pans met a ready sale, their stamped covers forming excellent sconces. Dido, Helen, Sappho, and the like form subjects for Morris's glass. Tissot, the artist, whose pre-Raphaelite stiff pictures we remember, now gives you a quaint maiden in a Gainsborough hat, relieved against a small sash window, with the Thames beyond, and has moved his style forward a few hundred years. And so it goes through all interior decoration. The monks and saints and mediævalism are banished to the ritualistic churches, while elsewhere reign supreme gods and goddesses, Earthly Paradise and Chaucer and Old Kensington, sunflowers, sconces, blue china, turned work instead of notches and chamfers, and above all Japanese screens, fans, stuffs, papers, pictures, bronzes, china.

Such is the hold that this spirit in design has obtained in England. In our judgment of it we greatly err in calling it "Queen Anne," for that after all is but one little phase of a strong reaction. It certainly is not strictly Queen Anne, although some designers affect that period; nor Stuart, though as a reaction some of the furniture men have toned their enthusiasm for bed-posts and broomsticks with a study of the orders; nor is there very much hope of a return to Italian or any orderly methods in a style whose very freedom is the making of a great artist, and which in the hands of a "duffer" will make the public long for the days when nothing was thought of but the always refined orders. On the contrary, all this can only truly be thought of as the period of odds and ends, beauty in any form, cosiness, comfort, picturesqueness, — in short, the "bric-à-brac" style. Perhaps Thackeray had as much to do with it as Morris or Shaw or the furniture men. But no one can shut their eyes to it in London. Outside its red bricks are hid under no bushel, but bravely stare out in the midst of a row of "compo." fronts; while inside if not master it has sensibly influenced almost every thing.

Now all this bric-à-brac style may be a passing fashion; but even if Scott and Burges and Street and Butterfield go on designing as they did, yet still this other spirit is firmly rooted in England, and of importance to us. Certainly however there is more in it too than was referred to at the society meeting. I well remember how in the French *atelier* the students used to look at English work, — the Manchester Town Hall for instance, — very pretty and fine, but not architecture. On the other hand in England, although the Royal medal has been given to M. Duc through the vigorous exertions of a few men, yet it is not probable that the mass of English architects either then knew who he was or what he had done, or would have cared for it if they had, or if they visited the Palais de Justice would have seen any thing but the Sainte Chapelle or the Conciergerie towers. Now it can hardly be said that this feeling of partisanship has ever existed here, partly because as outsiders we could see the injustice of it, and partly because we have too little that is good to revile any of it. Whatever was good and beautiful and true, or any of them, we have been disposed to admire, whether its arches were pointed or its openings spanned by lintels. Is not this view now strengthened by the strongest of cases when these men are found selecting the most debased detail to work with, and yet doing the most fascinating work? In short, here we certainly seem to see that it hardly matters at all what tools a man works with, provided he understands his business and is an artist. It is probably still an heretical thing in England to say that a man can design both classical and Gothic work. Yet here we see Mr. Shaw varying his sources of inspiration very greatly, and yet always remaining a great artist; Mr. Bodley designing choice pointed churches, and the School Board Building on the Embankment; and while the noble group of the Palace of Westminster closes the vista of the Thames, it will with all its faults remain an almost unsurpassed record of skill in the same man that designed the best of the London club-houses, and generally passed for a classical designer. So here we find the Queen Anne vagaries indorsing our views far more probably than their English advocates would admit, or at all events would have admitted.

Mr. Longfellow's paper has lately told us, apropos of the muddled architecture at the New York Capitol, that if the doctors differ so much in regard to style or the fusion of styles, the public now caring little enough about it will shortly both despise styles and those that administer them. Now it is perfectly true that the public care about special styles very little indeed, and calmly take whatever is given them; but incongruity of style, on the contrary, I think they are as alive to as others; and certainly I agree with them that any special style is of the least possible moment, but that congruity is of the utmost desirability. In this position the public are interested and do care; and if my memory serves me, the principal opponents of the extraordinary things proposed at Albany came from the laymen to whom the architects only lent a ready aid.

Thus I have meant to show that this movement is very strong and well established in England, and consequently of importance to our designers; that bric-à-brac, and Japan, and India, and classic mythology, and odds and ends, inspire it quite as much as Queen Anne; and that after all it is a curious support to our American eclectic notions. But lastly to those who do believe in revivals, "Queen Anne" is a very fit importation into our offices. There is no revival so little of an affectation on our soil, as that of the beautiful work of the Colonial days. Its quiet dignity and quaintness, its cosiness and elegance, always attract us. It is our legitimate field for imitation, and we have much of it to study right in our own neighborhood. In fact, any one who in summer drives over the ancient turnpike from Hingham to Plymouth will not only pass through a beautiful country full of old homesteads, but will find the sunflowers still nodding behind the gambrel-roofed houses that line the road through Queen Anne's Corner.

R. S. P.

CORRESPONDENCE.

BURNING OF THE SOUTHERN HOTEL.

St. Louis, April 14, 1877.

Editor of the American Architect and Building News.

Although three days have passed since the tragic burning of the Southern Hotel in this city, no information has yet explained the apparent inefficiency and mismanagement of those to whose care was intrusted so much valuable life and property. At the time of writing it seems that the destruction of the building would hardly have been more swift and complete had our fire department not

been in existence. It is to be hoped that the coroner's investigation may place this matter in a more favorable light.

The north front of the hotel occupied the entire block on Walnut Street, two hundred and seventy feet long. The east front on Fourth Street was one hundred and fourteen feet long, and the west front on Fifth Street was one hundred and twenty-five feet long. A south wing about forty feet wide ran through to Elm Street, two hundred and twenty-seven feet from Walnut Street. The entire building was six stories high above the pavement. The north, east, and south fronts were of Joliet limestone ashlar; numerous brick division walls ran up through all the stories, and the construction was of the most substantial character throughout. In evidence of this the three stone fronts yet stand unbroken from pavement to the top of the cornice, save a part of the east front, although every floor is burned through, and the entire inside has fallen into the cellar. The hotel was built during the war at a cost of some $1,250,000.

The fire is said to have originated in the store-room, which was in the basement adjoining the baggage-elevator and the grand stairway, and near the passenger-elevator and the ladies' stairway. A more dangerous place for a store-room would be hard to find. In it among other supplies were curled hair and *matches*, the powder and the spark. The engineer is reported as testifying that the matches used to be kept on a shelf, from which they sometimes would fall and ignite, and had recently been kept on the floor for this reason. This store-room, thus dangerously located and thus dangerously filled, is said to have been enclosed by a *board partition*.

Shortly after one o'clock on the morning of Wednesday, April 11, the office fire-alarm indicated fire in this quarter. At 1.23 A.M. the alarm was sent to the central station from the nearest street box. Why the office signal was not used, or whether there was any, does not appear. At 1.30, seven minutes later, the alarm was sent from the central station, but one block from the fire. A messenger could have traversed this distance half a dozen times in this interval. There was equal delay in reaching the fire and in getting to work. The chief of the fire department was ill, and did not come out till the second alarm. One of his deputies was likewise disabled, and a second lived two miles away. A Skinner Fire Escape was on hand, but was unaccountably slow in working. The fire soon reached the baggage-elevator, and mounting to the roof found vent; thence it burned downward through floor after floor till the building was destroyed. The halls and corridors were quickly filled with smoke from the openings on each story to the elevator, and the imprisoned guests were driven to the windows, whence many were rescued; but some were killed by falling or jumping to the pavement below. The night was a calm one, and the fire was confined to the hotel.

There was the usual provision of water-pipe and hose on the different floors, but there is no evidence of a single attempt to use them. The hotel officials seem to have left the task of arousing and rescuing the sleepers, some five hundred in number, chiefly to the volunteer efforts of those who happened to awake first, and who had the necessary presence of mind to go through the halls and give the alarm. Many acts of heroism in saving life were performed by firemen and citizens.

The coroner's investigation is to begin on Monday next, and there is a general expectation that blame will be found to rest somewhere, although there is talk of secret sessions. In the absence of proper legislation for such cases, it is doubtful if any punishment can be inflicted, whatever the coroner's verdict.

The most obvious lesson of this catastrophe is the imminent danger to life and property from a fire, however small, in a large hotel. When the Lindell Hotel burned in this city just ten years ago, the fire was discovered in the sixth story early in the evening, and without hinderance gradually worked its way downward through the entire building. Another often inculcated lesson is our pressing need of suitable legislation and efficient supervision of all public buildings in the interest of public safety, where individuals are powerless to protect themselves. Nothing but law rigidly enforced by capable officers sustained by public opinion will prevent the recurrence of similar disasters. Were one to inquire why any other hotel in this or other cities is not just as liable as the Southern to such a fatal conflagration, it would be difficult to find an answer. The same remark will apply to our theatres and other places of assembly. If it were possible to secure a competent and responsible officer charged with the duty of a monthly inspection of all public buildings, with reference to their safety against fire, and required to publish his report monthly in the daily papers, the public might at least be informed as to what precautions are most necessary, and where they are best observed. If this officer were required to close all dangerous premises, and to prosecute all derelict managers, under penalty to himself, the security would be enhanced.

The event teaches the necessity of making store-rooms fire-proof, and of keeping them away from all elevator shafts and stairways. They would most safely be located under a court, or otherwise, beyond the main building, and might be subdivided into small compartments with several electric annunciator plugs in the roof to each, supplemented by frequent inspection by a watchman. Elevator shafts and stairways might be non-inflammable, and fire and smoke proof doors should guard every opening to the former. Baggage-elevators might be external to the building. Were the gas-burners to every hall supplied from different risers an accident to one would not cut off all light. Two or more main stairs widely separated, iron balconies and fire-ladders to every story, brick division walls through every floor and running high above the roof, electric alarms in every room controlled at the office, and speaking-tube communication between the office and every part of the building, are additional precautions which naturally suggest themselves. A knotted half-inch rope in each room would probably have prevented the loss of a single life. In this respect the old-fashioned corded bedsteads would have been invaluable. A night watchman to each floor, specially charged with discovering fire and with saving life, might have conducted every sleeper safely from the building. It is understood that a law adapted to such cases as this is now before the State Legislature, and a vigorous attempt will be made to secure its passage.

CENTRAL PARK.

New York, April 16, 1877.

To the Editor of the American Architect and Building News.

Sir, — I find this evening in your issue of Saturday last, a note from Mr. Frederick Law Olmsted, calling in question the justice of some remarks of mine in the last annual address made before the Institute, as to the share of Mr. C. Vaux in the work of the Central Park.

Mr. Olmsted is perhaps the best judge of the share Mr. Vaux had in what is termed in the address "the æsthetical treatment of the grounds." But as to the "distinctively architectural works" of the Park, I beg to be allowed as an architect, and as an employé for some time on the architectural staff of the Central Park, to say that so far as a considerable portion of the twelve years he alludes to is concerned, Mr. Olmsted's last sentence is misleading, and "pointedly denies" to others than Mr. Vaux their "due professional record."

On the whole, I think I shall be doing justice to all parties in letting my paragraph about the Central Park stand just as it is; unless perhaps in assigning, on Mr. Olmsted's own authority, less of the credit for the landscape treatment to himself.

A. J. Bloor.

TRAPS.

Chicago, April 11, 1877.

To the Editor of the American Architect and Building News.

Dear Sir, — In your issue of Feb. 3, in the communication entitled "The Drainage of Country Houses," there is the following statement: "*I take the precaution to use traps which cannot lose their seals from any cause except evaporation.*" Will Mr. Bayles or some other correspondent inform the public where traps possessing this valuable property can be obtained?

It is well known that the traps almost universally used in plumbing, viz., tubes bent in the form of an S, are very liable to lose their seals by being "siphoned out." Ventilation of the waste-pipe will not prevent this; and the only remedy seems to be the adoption of an improved form of trap. Although attention has frequently been called to this imperfection in water-traps, I have yet to learn of any movement among architects or plumbers to secure any improvement. What is wanted is a trap through which air may be forced without driving out the water sufficiently to unseal it. Such a trap can be easily constructed. Are there any in the market?

Respectfully, Normand S. Patton.

NOTES AND CLIPPINGS.

Providence. — At the meeting of the City Council, April 19, the committee to whom was referred the proposed building-act made their report accompanied by a printed abstract of the proposed law. The law was then considered, section by section, and objections heard; and finally the city solicitor was instructed to apply to the Legislature at its next session (in May) for the passage of the act. It is but justice to the committee to say that their proceedings in the matter have been highly creditable to them, and gratifying to the friends of the law; after considering the subject fully themselves, they called a series of joint meetings of the committee of the R. I. Chapter, A.I.A., and a large number of the most experienced builders, at which every section was carefully considered, and suggestions received and heeded. The result is, that the law as now recommended, although somewhat reduced in bulk, contains nearly all the provisions originally reported by the Chapter, with many others of great value; and if it meets with the same kind reception from the Legislature, will be in many respects far the best yet enacted in this country.

The London Opera House. — It was recently asked in the House of Commons, what was to be done with the proposed new Opera House on the Victoria Embankment, work upon which had long since ceased because of want of funds. The chairman of the Metropolitan Board of Works answered that as the time fixed for roofing in the Opera House had expired, the Metropolitan Board of Works were considering what course they should adopt under the agreement.

Cincinnati Music Hall. — An interesting question in connection with the foundations of this building will soon be decided, probably in the courts. The entire foundations (including the concrete) are to be torn down, having been condemned by the clerk of works, Mr. John Maccammon. The history of this work will not prove uninteresting, as the following facts will amply demonstrate. Within a month or so after the close of the Republican Convention that nominated President Hayes, the old Exposition Buildings were sold off at auction; and when bought in their new owners began to tear them down, and at the same time the architects, Messrs. Hannaford and Procter, commenced laying the foundation for the new building. The tearing down of the old buildings and the laying out of new work was all going on at the same time; and while stakes were being driven, lines stretched, carts driven over the lines and destroying them, the execution of the limestone foundations had to be looked after at the same time; and under such circumstances were the walls built. The work was stopped about the last of December, and allowed to stand during the winter. An examination of the walls when work was resumed this spring revealed the fact that the mortar had frozen, and was therefore little or no better than sand; that the bonding was bad, that the concrete was valueless; and after considerable delay the contractor was ordered to tear down and rebuild his work. This he refused to do: whereupon he was ordered to remove all his unused materials, which he did. The walls are now being torn down under the direction of Mr. Maccammon, as clerk of the works. The contractor of course received payments on account during the progress of the work, and he was notified several times that his work was not satisfactory; but he now claims that when any work was condemned he immediately removed the same, and did as he was told; he claims further, that Mr. Procter was always on the ground, and must have known what was going on. It now remains to be seen who will have to pay for the tearing down and rebuilding of the walls, which were about two-thirds done.

The Dorchester Monument. — The monument that was dedicated on the 19th inst., at South Boston, Mass., is six and a half feet high, two feet thick, and three and one-half feet broad. The shaft is of Concord granite, and the base of Quincy granite. On the sides of the shaft are two cannon in relief, imitating those at the top of Bunker Hill Monument which were used at the battle of Bunker Hill. The cannon, the faces of the shaft, and the moulded work of the base, are highly polished, and the monument is finished at the top by four cannon-balls. The inscription on the front of the monument is as follows: —

Location of the American Redoubts
on
Dorchester Heights
Which compelled the Evacuation of Boston
By the British Army,
March 17, 1776.

Brickmakers' Strike. — The brickmakers of Trenton, N.J., struck on the 16th. They began work for the season on the previous Tuesday, and on Saturday night received only part pay, the employers saying the rate of wages for the season had not been decided upon. On Monday morning it was proposed to pay them at the rates of last fall, which were about twenty-five per cent less than last summer, and the men refused to work.

Mammoth Boiler. — A copper boiler is constructing for the Boston Navy Yard, to be used in impregnating timber for ship-building, docking, and piling, by the Thilmany process, which has been adopted by the General Government. It is to be eighty feet long, and six feet in diameter, with a spherical head, the material used to be pure copper five-eighths of an inch in thickness. The entire cost when completed will be about $30,000. The contract was awarded to the Globe Iron Works of Cleveland, O. The copper will be finished and shipped from Boston to Cleveland, and the entire work will probably be completed by the 1st of June. It will then require nine cars to transport it to the Navy Yard.

American Inventive Progress. — Under the above heading the *Scientific American* of May 7 has a long and interesting article, from which we make the following extracts: —

To show with what rapidity inventors made improvements on inventions embodying original principles [says the writer], it may be noted that in the early days of the sewing-machine 116 patents were granted for improvements thereon in a single year; and out of the 2,910 patents issued in the year 1857, 152 were for improved cotton-gins and presses, 164 for improvements on the steam-engine, and 198 for novel devices relating to railroads and improvements in the rolling-stock. In the year 1848, three years after the publication of this paper was commenced, but 660 patents were granted; but under the stimulus of publishing those inventions as they were patented, ten years later, in 1858, the number had increased sixfold, reaching 3,710, while up to January 1, 1859, as already stated, the aggregate of patents issued amounted to 17,467; since that time and up to the present the total is 181,015. And curiosity here leads us [adds the editor] to review our own work, extending back, say, twenty years, or to 1857, a period during which 170,745 patents have been issued. We find, by actual count, that 62,062 applications have been made through the Scientific American Patent Agency for patents in the United States and abroad. This averages almost ten applications per day, Sundays excluded, over the entire period, and bears the relation of more than one quarter to the total number of patents issued in this country up to the time of writing.

Tree-Planting. — A notable act of the last Connecticut Legislature on the subject seems to have escaped attention. It provides that land planted to chestnut, hickory, ash, white oak, sugar-maple, European larch, white pine, or spruce, — a number not less than 1,200 to the acre, — shall be exempt from taxation for ten years.

A New Engineering Scheme. — One of the latest engineering projects is that of blocking up the Straits of Belle Isle, which separate the coast of Labrador from Newfoundland, in order to divert into the Atlantic the vast fields of ice which come down from Baffin's Bay and make the shores of the Gulf of St. Lawrence much colder than those of the ocean. It is thought that if the straits were shut up, the climate of Canada would be much tempered and navigation in the gulf could be kept up all the year round. The straits are eight miles and a half wide in their narrowest point, and very deep.

A Prudent Step. — The Committee on Church Building reported at the New England Methodists' Conference lately that trustees of churches should hereafter be admonished by their mistakes against contracting debts for church building without scrupulous regard to expense, and the actual needs of church societies and their communities.

Tennessee Marble. — Large quantities of marble are being shipped from Knoxville, Tenn., to San Francisco, to build a Stock Exchange, which it is stated will be the finest structure of its kind in the United States.

The Injury done by Bad Copies. — An illustration of the influence of bad art in destroying the market value of high-class work has just occurred in London. Twenty years ago, much excitement prevailed there anent the Poniatowski gems, upon which an elegant book in a couple of quarto volumes, with 471 photographic illustrations, was published at the price of $105. The work was compiled and annotated by James Prendeville and the late Dr. Maginn, and edited by John Tyrrell; and for the purpose of taking the photographs Mr. Tyrrell took absolutely perfect casts of the entire collection of gems. The illustrations in their character as such were, of course, subject to copyright; but occasion was seized by nearly every Italian dealer in plaster casts to put into circulation series of imperfect reproductions, with which ultimately the market was so overstocked that the most nearly perfect of them all could not at last be sold for four cents apiece; and to sell them at all they had to be shipped to the United States, where the moulds eventually followed them. The Tyrrell collection, the only really perfect one, has changed hands, and the writer was asked to ascertain its value. But for the bad copies in existence, these examples of fine art would have brought a fair sum if put up at auction, but as matters stand they would not realize enough to make it worth while to dream of selling them: so, as it would be a farce to place perfect and imperfect work upon the same level, the present owner is advised to retain his property, which might else have borne a high value, if for no other purpose, at all events for that of using the subjects for illustrative vignettes, tail-pieces, and initial letters.

Roman Pottery-Kilns. — Two good specimens of Roman pottery-kilns have been unearthed near Colchester Railway station, England. One is a rectangular furnace leading to an oven 5′ 3″ long, 4′ 1″ wide, and 4′ high, with three niches on each side. The other being circular is of a more unusual form and is 4′ 8″ in diameter.

Malmaison. — The palace of Malmaison, which was to Napoleon the Great and Josephine what Versailles was to Napoleon III. or the Trianon to Louis XVI., is to be sold, and the land surrounding it cut up into building-lots.

Old Paris. — *La Bibliographie de la France* calls attention to the fact that in widening the Rue Saint-Jacques at Paris, many houses of historic interest are being swept away. "Au Soleil d'Or," in this street, is stated to have been the sign of the house where in 1473, three Germans, named Gering, Friburger, and Krantz, established the first Parisian printing-press; and from the Rue Saint-Jacques emanated many of the most ancient bibliographical treasures of the Sorbonne National Library.

The Tuileries. — The *Société Centrale des Architectes* of Paris has presented a petition praying for the restoration of the Tuileries.

German Artisans and the Paris Exhibition. — The German workmen employed in various branches of industrial art have petitioned the Reichstag to reconsider its edict forbidding Germans to take part in the Exhibition of 1878.

Draining the Zuyder Zee. — Preparations are now going on to drain the Zuyder Zee. A dam 40 kilomètres (24¾ miles) long, 50 mètres broad at its base, and 1½ mètres above the usual level of high water, is to be carried across the gulf. Upon this will be erected pumping-engines capable of discharging 1,716,000,000 gallons a day. Estimating the average depth of the gulf at about 4½ mètres, it will take steady pumping for 16 years to empty the enclosure. The cost of reclaiming the 500,000 acres now under water is estimated at about $67,000,000. It is confidently expected that about 430,000 acres will be suitable for agriculture, and can be sold at an average price of $800 per acre.

Fire-Proof Curtain. — Voss, Mitter, and Co., of Berlin, are fitting a new metallic fire-proof curtain to the theatre in Dresden, now rebuilding after destruction by fire. It is of corrugated iron. Exposed to heat, a brisk circulation of air is set up in the sections of tubes formed by the corrugations, the heated particles ascending, and colder particles flowing in to supply their place. The latter keep down the temperature so considerably that a sweating breaks out in the plate of which the curtain, or shutter as strictly speaking it is, is composed. The shutter made for the Dresden theatre is forty feet high and forty-six feet wide. The method of riveting the plates of which it is composed, and of raising and lowering it, are the subjects of patents.